



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C07K 1/00, 14/00, 17/00	A1	(11) International Publication Number: WO 00/66616 (43) International Publication Date: 9 November 2000 (09.11.00)
(21) International Application Number: PCT/US00/11992 (22) International Filing Date: 3 May 2000 (03.05.00) (30) Priority Data: 60/132,312 3 May 1999 (03.05.99) US (71) Applicant (for all designated States except US): ADVANCED RESEARCH & TECHNOLOGY INSTITUTE, INC. [US/US]; Suite 111 501 North Morton Street, Bloomington, IN 47404 (US). (72) Inventor; and (75) Inventor/Applicant (for US only): GREGORY, Richard, L. [US/US]; 4590 Buckingham Court, Carmel, IN 64033 (US). (74) Agents: GANDY, Kenneth, A. et al.; Woodard, Emhardt, Naughton, Moriarty & McNett, Bank One Center/Tower, Suite 3700, 111 Monument Circle, Indianapolis, IN 46204 (US).		(81) Designated States: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: METHODS AND COMPOSITIONS FOR CONTROLLING DENTAL CARIES, AND RECOMBINANT SmaA POLYPEPTIDES USEFUL FOR SAME		
(57) Abstract		
<p>Described are methods and compositions for controlling dental caries in a host which involve the administration of a fimbrial-associated adhesion from <i>S. mutans</i>, SmaA, or a fragment thereof, to the oral cavity of the host. Methods for controlling dental caries include administering non-immunogenic polypeptides from bacterial adhesions to competitively block bacterial attachment without implicating the immune system of the host. Novel isolated DNA encoding SmaA or a fragment thereof, as well as recombinant SmaA protein of fragment, and methods for their production, are also described.</p>		